

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PPD70337/WO	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/GB2004/005183	International filing date (day/month/year) 09.12.2004	Priority date (day/month/year) 09.12.2003	
International Patent Classification (IPC) or national classification and IPC A01N33/04, A01N33/08, A01N33/12			
Applicant SYNGENTA LIMITED			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

- sent to the applicant and to the International Bureau) a total of sheets, as follows:
  - sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
  - sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

Date of submission of the demand 21.06.2005	Date of completion of this report 07.11.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Marie, G  Telephone No. +49 89 2399-



## **INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.  
PCT/GB2004/005183

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

### Description, Pages

1-11 as originally filed

## **Claims, Numbers**

1-44 as originally filed

a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes:	Claims	8-11,30-33
	No:	Claims	1-7,12-29,34-44
Inventive step (IS)	Yes:	Claims	-
	No:	Claims	1-44
Industrial applicability (IA)	Yes:	Claims	1-44
	No:	Claims	-

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

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**Re Item I**

**Basis of the opinion**

The documents to which this communication refers are numbered in their order of appearance in the international search report.

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Novelty (Article 33(2) PCT)**

Due to the broadness of the subject-matter claimed, many documents were found to be relevant for either novelty and inventive step (see cited parts of documents **D1-D8** and **D10-15** in the international search report) or for novelty alone (see cited part of documents **D16-D20**). Indeed, the combination of the preferred herbicides with amines or salts thereof and short-chain alkyl quaternary ammonium is known from the cited prior art.

As a consequence, it does not seem to be expedient to carry out a complete description of the whole set of relevant documents.

**2. Inventive step (Article 33(3) PCT)**

The remaining new subject-matter claimed does not seem to involve any inventive step since it either concerns the juxtaposition of known and suggested measures (see in particular document **D9**, with regard to the presence of an electrolyte purgative and a pH-triggered gelling agent and document **D3**) or is merely regarded as normal design for the skilled artisan.

**3. Industrial applicability (Article 33(4) PCT)**

Industrial applicability of the present invention is acknowledged.

**Re Item VII**

**Certain defects in the application (form or content)**

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4. A reference to relevant cited prior art documents is missing from the description.

**Re Item VIII**

**Certain observations on the international application (clarity)**

5.1 The relative term "short-chain alkyl" does not have a generally accepted meaning in the field of organic chemistry with respect to its maximum number of carbon atoms. Such a term is ambiguous and therefore not suitable for clearly defining the subject-matter for which protection is sought. This leads to a lack of clarity of claims 1, 5-7, 15, 21-23, 27-29 and 37-44 (Article 6 PCT).

5.2 The use of the term "*about*" in claims 17-22, 39-44 and in the description renders the subject-matter unclear within the meaning of Article 6 PCT (see also PCT Guidelines 5.38).

5.3 Claims 6, 7, 21, 22, 28, 29, 43 and 44 contain the word "*preferably*". Features that follow said term correspond to possible alternatives which are not restrictive. It is therefore not possible to distinguish the subject-matter of said claims from the independent claims to which they refer. In order to comply with the requirements of Article 6 PCT, these features should become restrictive by removal of said term in the wording of said claims (see also PCT Guidelines 5.40).

5.4 In claim 23 and on pages 1 and 2 of the description, formula (II) has a substituent R4. However, the definition that follows refers to R<sup>2</sup>. This discrepancy is not allowable under Article 6 PCT.

5.5 Claims 17-19 refers to claim 16 that is dependent on claim 15. However, the subject-matter of said claims appears to be broader than the subject-matter of claim 15. In claim 15, the second adjuvant is present at a lower concentration than the amine or the short-chain alkyl quaternary ammonium, which is only partly the case in claims 17-19.

The same applies for claims 39-41 which refers to claim 37.

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**5.6 Entity claims 24-44 refers to activity claim 23. This is not allowable under Article 6  
and Rule 6.4 PCT.**